



NOTES

- 400A UGF FEEDER CUBICLE IS RELOCATED TO THIS LOCATION (+H2 OR +H2B) INSTEAD OF CAP BANK FEEDER CUBICLE BASED ON MANUFACTURE'S RECOMMENDATION/STANDARD DESIGN AS PER SEC-00A PREVIOUS PROJECTS.
- THE MAXIMUM TEMPERATURE FOR ALL NEW ELECTRICAL EQUIPMENT/MATERIAL SHALL BE 55°C FOR OUTDOOR AND 40°C FOR INDOOR IN ACCORDANCE WITH 48-TMS-03-R1.
- 132kV GIS & 13.8kV SWGR CT/VT PARAMETERS ARE BASED ON PTS PROTECTION REQUIREMENT. CT/VT PARAMETERS SHALL BE SUBMITTED TO APPROVAL OF CT/VT SIZING CALCULATION.
- THE METERS AND METERING DEVICES ARE BASED ON PTS PROTECTION REQUIREMENT IN ACCORDANCE WITH 48-TMS-03-R0.

LEGENDS

132kV SYSTEM

- 3 WDG POWER TRANSFORMER WITH OLTC ON HV SIDE
- SEC 132kV BAY DESIGNATION
- GIS CIRCUIT BREAKER
- GIS DISCONNECTOR WITH MAINTENANCE EARTHING SWITCH (MOTOR OPERATED) WITH LEADS BROUGHT OUT ON 10kV BUSHING
- GIS HIGH SPEED EARTHING SWITCH (MOTOR OPERATED + SPRING) WITH LEADS BROUGHT OUT ON 10kV BUSHING
- GIS VT 13 WDG WITH HAND OPERATED ISOLATING LINK WITH PRIMARY NEUTRAL BROUGHT OUT ON 10kV BUSHING
- SF6/CABLE INTERFACE (GIS TO CABLE INTERFACE)
- AIR/OIL INTERFACE (GIS BUSHING TO CABLE INTERFACE)
- SF6/AIR INTERFACE (GIS TO AIR BUSHING)
- APPARATUS DESIGNATION IN SAS SURGE ARRESTOR WITH COUNTER

13.8kV SYSTEM

- SEC 13.8kV BAY DESIGNATION
- 13.8kV CIRCUIT BREAKER DRAWOUT TYPE (TYPE V04 OF ABB MAKE)
- EARTHING SWITCH (HAND OPERATED)
- DRAWOUT VOLTAGE TRANSFORMER (2 WDG) WITH HV FUSE
- DRAWOUT VOLTAGE TRANSFORMER (2 WDG) WITH HV FUSE
- AUX. TRANSFORMER
- NEUTRAL EARTHING RESISTOR

13.8kV CAPACITOR AND ASSOCIATED EQUIPMENT

- SURGE ARRESTOR WITH COUNTER
- SURGE ARRESTOR
- SERIES REACTOR
- CAPACITOR BANK
- CABLE CONNECTION
- NEUTRAL CT FOR CAP UNBALANCE PROTIN
- NEUTRAL VT (SINGLE PHASE)

REFERENCE DRAWINGS

DRAWING NO.	DRAWING TITLE
CE-320748	DRAWING CONTROL SHEET
PTS-11CNI28	SCOPE OF WORK AND TECHNICAL SPECIFICATIONS
CT-903198	TENDER SINGLE LINE DIAGRAM

AS-BUILT

NO.	DATE	BY	DESCRIPTION	CHKD.	DEPT.	APPROV.
01	MAY-13	AKB	FOR APPROVAL	AA	AKK	AKK

DRAWING COMPLETION CERTIFICATE (GCC)

نقل الكهرباء

الشركة الوطنية لنقل الكهرباء

AS-BUILT BY: _____ DATE: _____

DRAWN BY: _____ CHECKED BY: _____ SCALE: NONE

DATE STARTED: JUNE-2012 DATE COMPLETED: _____

THIS DRAWING IS NOT TO BE USED FOR CONSTRUCTION OR FOR ORDERING MATERIAL UNTIL CERTIFIED AND DATED BY: _____ DATE: _____

AMR SINGLE LINE DIAGRAM

132/13.8kV SUBSTATION #8162

2ND INDUSTRIAL AREA SUBSTATION #8162

RIYADH SAUDI ARABIA

JOB ORDER NO.	INDEX	PLANT NO.	DRAWING NUMBER	SHEET NO.	REV. NO.
1113113/00	P	C469	CA-320751	01 of 01	00

NG-A 02012/001

DMS VECTOR